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Fall 2016 James F. Slevin Assignment Sequence Prize Application

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Instructor's name: Amelia Hall

Department Course # and title: ENGL 17932, "Medical Monsters"

Eng 1191.104

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Title of Assignment Sequence: "Digital Dissections Using Voyant"

Instructor's signature: Amelia Lee Hall

Date: 12/14/2016

“Digital Dissections Using Voyant”

Assignment Sequence Contains six documents, labeled A-F: 2 digital humanities handouts; 2 lab-report writing assignments; 1 concluding paragraph writing assignment; 1 literary analysis essay prompt

Rationale for assignment sequence:

This assignment sequence, meant lead to an essay written in the last third of the semester, is designed to expose students to one of the most recent trends in humanities scholarship—distant reading, by digital means. Through “digitally dissecting” a novel about dissection (*The Island of Doctor Moreau*) using the data-visualization tool Voyant, students can practice some of the newest analytical methods used by professional literary critics, as well as gain familiarity with a tool that can help them in editing their own writing. In encouraging students to begin a literary analysis essay with a digital dissection, this assignment also compels students to “experiment” with the way they begin their academic essays in keeping with one of the “Medical Monsters” course’s overlapping goals, to teach students that the writing process is a process of experimentation, rather than a straight, predictable, easy-to follow path.

Plan for Responding to student work:

The instructor will guide an in-class digital-dissection assignment, in order to model for students what good “distant reading” practice looks like. In addition, the instructor will facilitate an in-class “dissection” of a final paragraph, in order to help students understand the rhetorical moves that a successful conclusion to a literary analysis essay will make. The instructor will also read and respond to students’ “Lab Report 2,” showing where their experimental methods are effective and strong, and places in the experiment which could use further fine-turning, so that the students can take this feedback into account when writing their literary analysis essay.

A. Digital Humanities Handout

Rationale: This handout provides students with quick overview of the data visualization tool “Voyant” and general introduction to the digital humanities. Through framing the information as a series of questions and answers, the handout explains most of the questions first-year students are likely to have about the tool and the reading methods it encourages. Furthermore, through explaining to students how this tool is useful as a revision aid, this handout enables student to see that Voyant can be used for coursework in disciplines other than English.

Digital Humanities Background: Voyant

“What is Voyant?”

Voyant is a “data visualization” tool, that enables you to re-envision your chosen text in different kinds of ways. This process of re-envisioning a text using a digital tool is one way to perform **distant reading**.

“What is ‘distant reading?’”

Distant reading is a relatively recent term in English literary studies. It refers to a process by which one comes to an understanding of literature not by studying particular texts, as close-reading does, but by aggregating and analyzing massive amounts of data.

“Why are we learning about distant reading—I though English critics used close-reading?”

The purpose of this lesson is to help you discover how “distant reading” and “close-reading” can be used in tandem to generate interesting, insightful readings of literature.

“How is Voyant useful for a literary analysis paper?”

Voyant, through its digital dissecting capabilities, provides a means for us to see texts in new ways—and seeing texts in new ways, can lead to innovative sorts of interpretations that we hadn’t thought of before.

“How is Voyant useful as a writing and revision tool?”

Voyant can help you perform a “diagnostic dissection” of your own writing. If you input one of your own essays, Voyant can help you to diagnose potentially problematic patterns of language usage in your own writing (word choice, sentence structure, etc.).

Voyant can also help you compare the texts of many different essays at once, and discern common themes and intellectual preoccupations among them.

B. Lab Report I

Rationale:

This exercise connects a recurring theme in the text the students are reading (experiments on the body of a woman) with the teaching of a research skill (the ability to digitally “experiment” on the textual body *Rappaccini’s Daughter*). Doing so enables students to begin thinking about the extent to which altering and experimenting with the body of a text changes how we read it.

Assignment

In this assignment, pairs of students perform a simple digital experiment on the text of the short story “Rappaccini’s Daughter,” which asks them to first generate a list of terms they associate with the texts, and then asks them to use Voyant to see if a digital reading of the text itself supports their assumptions. At the end of the assignment students come back together as a class (part three) and discuss their findings and questions about the tool.

Lab Report I: Experimenting on the (Textual) body of “Rappaccini’s Daughter”

“Rappaccini’s Daughter” is, in many respects, about a woman who has experiments done to her body. It is fitting, then, that today, in keeping with one of the story’s main themes, we are going to perform experiments on the (textual) body of “Rappaccini’s Daughter.” If you remember, in the story, once Giovanni finds out that Beatrice’s skin is poisoned, he “reads” her differently. Similarly, in this session, I want us to begin thinking about the extent which altering and experimenting with the body of a text changes how we read it.

Part One: Hypothesis

1. If you had to make a list of terms which you associate with “Rappaccini’s Daughter,” what words would you use?” Write them down here.
2. What terms do you think the text itself uses most often? Write some down here.

Part Two: A Simple Experiment

Now, you’re going to experiment a little bit with a digital tool called Voyant, in order to see if these terms lists you have generated actually align with the language of the text itself.

1. Cut-and-paste a MSWord file containing the entire text of “Rappaccini’s Daughter” (available on Blackboard) into Voyant.
2. Look at the word cloud—which is, in essence, the body of the short story’s text transformed. Words gets bigger or smaller, depending on their frequency relative to other terms. Write down the words that are largest here, as well as the words that are smallest.
3. Did the terms list you generated align with the frequency charts created by Voyant? Why do you think the data does/does not line up with the list of words you made?

Part Three: Entire Class Discussion Questions

1. Were you surprised by any of the words that appeared frequently? What words appeared that you would not have thought of?
2. What sorts of questions can you imagine asking about this text using Voyant?

C. “How-to” Handout

How to perform a “Digital Dissection” Using Voyant

Rationale:

The Island of Doctor Moreau, like “Rappaccini’s Daughter” has at its center a doctor who continually performs experiments on bodies. However, Moreau is different from the botanist Rappaccini, in that his experiments consist of the splicing and dicing of animals. In this lesson, students learn how place themselves in the role of Doctor Moreau through performing their own digital dissections on the text of *The Island of Doctor Moreau*. Their objective is to determine whether altering and experimenting with the body of a text changes how we read it.

How to perform a digital dissection, in six steps:

The Island of Doctor Moreau, like “Rappaccini’s Daughter” has at its center a doctor who continually performs experiments on bodies. However, Moreau is different from the botanist Rappaccini, in that his experiments consist of the splicing and dicing of animals. Today, we are going to place ourselves in the role of Doctor Moreau through performing our own digital dissections on the text of *The Island of Doctor Moreau*. Our objective is to determine whether altering and experimenting with the body of a text changes how we read it.

Step 1: Figure out where the (textual) bodies are buried

Before you can perform a digital dissection, you need to locate a digital version of the text you want to use.

- Potential places to look: Google Books, HathiTrust, and Project Gutenberg. If all else fails, you can also scan a hard copy of your text into PDF format.
- Acceptable Formats: PDF, MS Word document, website URL

Step 2: Clean up your data

A healthy and viable digital dissection begins with “clean data.” “Clean data” refers to a copy of the text which has been:

- Proofread for spelling errors (If you are uploading a PDF document, this proof-reading step is especially important, for OCR recognition is still imperfect).
- Edited to remove unnecessary extra textual materials (Tables of contents, prefaces, editor’s notes, publishing information, etc.)

Step 3: Generate a “first look” of your digitally dismembered text

Upload or copy-and-paste your cleaned-up text into Voyant, and generate your first digital dismemberment of your text. Viewing this initial result can help you come up with an experimental question. This “first look” will also give you the opportunity to define the terms for your word cloud.

- *Stopwords*: words that won’t appear in the word cloud.
- *White list*: The words you want to appear in the word cloud.

Step 4: Come up with a question about the text that Voyant can help you explore

The capabilities of Voyant include:

- Calculating word frequencies
- Showing you how often words occur in relation to one another

- Generating graphs showing how word usage rises and falls across the course of a text
- Creating word clouds
- Dividing up the text into different sections for analysis

Example question templates:

1. How often do the terms ____ and ____ occur in ____?
2. What sorts of terms occur most often in *The Island of Doctor Moreau*?
3. What sorts of words fall out of use as the text progresses, and what words gain greater prominence?
4. What sorts of terms always occur in tandem with the word ____ in the novel?"

Step 5: Conduct your experiment on the data

In other words, get in Voyant, poke around in the text, cut things up, cut things out, and see what you find. This may involve further defining “white lists,” examining graph trends, etc.

Step 6: Use your experimental findings to take you back into the novel itself

Use the results of your distant-reading/digital dissection to help you generate a question about the novel itself that can be answered with close-reading. This question will likely be a modified form of the question posed in Step 4.

Example question revisions, using the questions from Step 4:

1. Why do the terms ____ and ____ always occur close together in ____?
2. What sorts of conclusions can we draw from the fact that the word _____ appears only once in the novel, but appears in its climatic scene?
3. The term ____ starts being used halfway through the novel. Why is this significant?
4. Many words relating to ____ occur in tandem with the word ____ throughout the novel, but words connoting ____ appear—counterintuitively—much less often. Why?

D. Lab Report 2: Digital Dissection Experiment

Rationale:

“Close-reading” and “distant-reading” are often (falsely) opposed in the minds of literary scholars. This assignment, in tandem with the “Literary Analysis Paper” assignment, is designed to help students discover how digital reading and close-reading can work together in the service of a literary analysis essay, while also allowing them to hone their skills at using Voyant.

Lab Report 2: Experimental reading through Digital Dissection

Begin your literary analysis paper by using Voyant to perform a digital experiment on *The Island of Doctor Moreau* or “The Case of George Dedlow,” in accordance with the steps outlined on the “How to Perform a digital dissection” handout. Try to discover something surprising about the text. Then, write up your findings in a “lab report” (minimum length: 3 pages) which:

1. Articulates what you hoped the digital experiment would help you learn about the text.
2. Explains, in as much detail as possible, what digital experiment(s) you performed on the text.
3. Describes your results. In other words, evaluate whether your experiment yielded any intellectual fruit, or whether it was unsuccessful; in either case, describe how your success/lack of success altered or shaped the direction your ideas for your paper took.
4. Critically assess Voyant as a research method, asking yourself: what do you think are the benefits of reading a text in the digital, quantifiable ways allowed for by Voyant? What are the drawbacks?

Some questions you can ask yourself to begin:

- “What assumptions have we made about *The Island of Doctor Moreau* in class? Can these assumptions be challenged or complicated through digitally reading *The Island of Doctor Moreau*? “
- “What topics in the novel am I interested in, and can a digital reading reveal something to me about those topics?” (for example, if you are interested in the various ways in which body parts are described, you might use Voyant to obtain a quick contextual comparison of all the places in which these parts are mentioned in the novel.)

***A note:** Your digital experiment in Voyant **does not have to be successful**—indeed, if you knew you would be successful before you began, you wouldn’t be doing much of an experiment at all. If your experiment is unsuccessful, ask yourself what you learned from your lack of success.

Requirements

Formatting: Size twelve “Times New Roman Font,” double-spaced, with 1-inch margins, citations in MLA format, and page numbers listed in the upper-right-hand corner. This “lab report” can be answered either in list form, or in essay form—both are fine.

E. Dissecting the Ending

Rationale:

This in-class writing assignment, following from a lesson on “Effective Endings,” is designed to help students better-understand what makes for an effective ending for a literary analysis paper, a skill that will be emphasized in their “Digital Dissection” essay. Through “dissecting” a sample concluding paragraph and labeling its constituent parts, students will come away from the assignment with a more concrete understanding of the rhetorical gestures and intellectual maneuvers that make for an effective ending to a literary analysis essay.

Assignment:

Dissect the sample “concluding paragraph” below, and try to label all of the places the writer answers the “so what” question.

Some questions to keep in mind:

- Where does the writer explain how her/his argument intervenes in existing scholarly debates?
- Where does the writer suggest directions for future research.?
- What sorts of directions are they?

In recognizing the feminist function of *Middlemarch*'s aesthetic dimensions, a new dimension for inquiry into the novel emerges. Far from Eliot's being ambivalent, hostile, or unsuccessful with regards to the “Woman Question,” *Middlemarch*'s epigraphy suggests, at the very least, that her attitude towards Victorian feminism was positively oriented towards the end of her life. If Eliot did indeed construct *Middlemarch*'s epigraphy in response to the gendered social structures of her world, this realization brings forth far more questions for Victorian scholars than it answers, as it compels us to consider what other sorts of social commentary might inhere in the epigraphs of *Felix Holt* and *Daniel Deronda*, and, more broadly, within the epigraphs of novels by other authors. Such an understanding allows readers to see that epigraphs, far from being meaningless insertions or pre-patterned forms derived from a “Wisdom Literature” prototype, instead offer an additional layer of meaning to the already highly complex Victorian novel, a layer which comments upon and complicates the main narrative. Through their two-fold process of concentration and miniaturization, *Middlemarch*'s epigraphs provide a set of “proportional ciphers” which allow readers to perceive Dorothea's and Eliot's seemingly small lives as, in fact, lives operating on a grand scale. In other words, the complex relationships among *Middlemarch*'s prefatory quotations and the rest of the novel present a subtle feminist argument through epigraphical form: The women's story is the epic. The men's? Epigrammatic.

F. Literary Analysis Paper: Experimental reading through Digital Dissection

Rationale:

“Close-reading” and “distant-reading” are often (falsely) opposed in the minds of literary scholars. This assignment, in tandem with the “Lab Report 2” assignment, is designed to help students discover how digital reading and close-reading can work together in the service of a literary analysis essay, and also allows them to hone their skills at using Voyant.

Prompt

The Island of Doctor Moreau, like “Rappaccini’s Daughter,” has at its center a man who just can’t stop experimenting on bodies; except this time, rather than a father experimenting on the body of his daughter, we have a physiologist performing experimental vivisections on the bodies of animals. For this literary analysis essay, take your “digital dissection” of *The Island of Doctor Moreau* and/or “The Case of George Dedlow,” and use the results of your experimental digital reading to guide yourself into a close-reading of the text. Doing so will allow you to occupy, in metaphorical method, the place of an experimental doctor such as Rappaccini or Moreau, as well as allow you to discover how digital reading and close-reading can work together in the service of a literary analysis essay.

One example of how this could work: If you are interested in writing about pain in the novel, you might pay attention to how the terms “pain,” “sound,” and “cry” are rendered in Voyant, and, after seeing how the terms are linked and observing their frequencies of occurrence in the charts, discover that expressions of sound are far more likely, in this novel, to be linked to perceptions of pain than sights of suffering animals are. You might then use this insight to take you into close-readings of the novel’s descriptions of pain and affect.

Requirements

Formatting: Size twelve “Times New Roman Font,” double-spaced, with 1-inch margins, citations in MLA format, and page numbers listed in the upper-right-hand corner.

Evaluation Criteria

1. *Close textual analysis* (that is, using quoted textual material to support your claims).
- 2) The writer’s ability to present a *well-articulated, non-obvious thesis*.
3. *The ending’s ability to explain the significance of the argument*, through articulating how the argument intervenes in existing scholarly debates, and/or suggesting directions for future research. (See handout on “Endings”).
4. The *structure of body paragraphs* (in particular, the use of topic sentences and segue sentences to construct connectivity among body paragraphs.)

Abstract

This assignment sequence consists of two lab report writing assignments, an informal writing assignment on endings, an introduction to digital humanities handout, and a “How to Perform a digital dissection” handout, all of which prepare students to write a literary analysis essay about *The Island of Doctor Moreau*.

Tags:

Digital humanities
Voyant
Distant Reading
Nineteenth century
Doctor Moreau
Endings

Reflections on Sequence Assignments:

What was successful:

Many students took to the “Voyant” tool with aplomb, and I was especially pleased to see one of my students, a computer-science major, become more excited about this assignment than he had been about anything else all semester. During the in-class lab assignments he enjoyed helping his classmates, and also helped spearhead our discussions about the tool’s efficacy. After the digital dissection assignments were turned in, he asked if upper-level English courses would allow him to pursue similar sorts of digital work, for he was considering minoring in English.

This student’s excitement over Voyant enabled me to see that incorporating digital humanities tools into the classroom is a great way for English departments to reach, and excite, students in other majors who might not think that an English course has a place for them to showcase their skills and knowledge. Unknowingly, in incorporating Voyant into the classroom, I had provided a space that allowed for the diverse skill-sets of my students to emerge.

What was less successful:

A few times during the in-class “Voyant” lessons, Voyant crashed or simply stopped working. Should future instructors plan to use Voyant in the classroom, it would be a good idea to have a back-up plan in case this happens. I would recommend what I did for the class’s second Voyant session, which was to take screen-shots of the “experiment” I would have done with my students, and walk them through the pictures while waiting for the technology to work again.